



High-rise fire safety workshop for owners, superintendents and property management

The Garry W. Morden Centre

- Evacuation assembly area will be at the front of the building on the grass boulevard.
- Emergency exits.
- Washrooms.



AGENDA

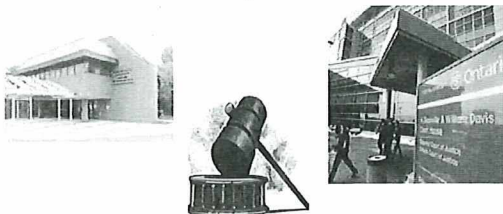
- Registration confirmation.
- Applicable legislation.
- Owner's, supervisory staff and tenant's responsibilities.
- Building design.
- Public fire education and common issues.
- General maintenance requirements and best practices.

Learning outcomes

- Applicable legislation.
- Owner's responsibilities.
- Property management's responsibilities.
- Superintendent's responsibilities.
- General building design features in a high-rise building.
- Public fire education and common issues.
- General maintenance requirements and best practices.



Applicable legislation and owner's responsibilities

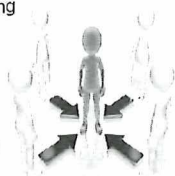


Provincial legislation

- Fire Protection and Prevention Act (FPPA)
- Fire Code
- Residential Tenancy Act
- Building Code Act
- Building Code

“Owner” is...

Any person, firm, or corporation having control over any portion of the building or property under consideration and includes the persons in the building or property (reference Fire Protection and Prevention Act (FPPA)).



Owner's responsibilities include ...

- Establish and implement emergency procedures.
- Appoint and designate “Supervisory Staff”.
- Train supervisory staff on emergency procedures before giving responsibility for fire safety.
- Hold fire drills in accordance with the fire code.
- Implement and maintain requirements set out in the fire safety plan.
- Maintain fire safety records.

Owner's responsibilities also include ...

- Ensure the fire safety plan is up-to-date.
- Fire plan to be reviewed annually. Document this.
- Delegate and train alternate supervisory staff in the event the primary staff are absent.
- Ensure the fire safety plan, or parts thereof are distributed.
- Instruct occupants on the operation of the fire alarm system.
- All of the above are required to be in compliance with the FPPA.

Responsibility based on ability

- You are expected to take action based on your qualifications.
- In the case of building staff you are expected to react to fire incident and alarms at a higher level than your tenants based on your knowledge and training.
- You are not expected to be firefighters as you are not trained in that regard, however, you are expected to react appropriately to a situation.

Tenant Information?

- Consideration should be given to provide all new tenants fire safety procedures.
- What about tenants who have lived in the building for years?



Tenants can be liable

- A tenant is facing charges under the Ontario **Fire Code** after disabling their apartment's smoke alarm.
- Smoke alarms give occupants the early warning needed to safely evacuate a building when fire conditions exist.
- Correctly installed and maintained, smoke alarms save lives.

Landlord conviction

- Ontario Court of Justice found two landlords guilty of violating the **Fire Code** at their apartment building.
- Fines to the landlords included a \$5,000 penalty, plus costs and victim fine surcharges for multiple violations at their building:
 - fire separation doors propped open by door stoppers.
 - combustibles had been stored in exit stairways.
 - the landlords had failed to keep records of regular testing of the building's smoke alarms.

Federal legislation

- Criminal Code of Canada.

Criminal negligence

Criminal negligence

219 (1) Every one is criminally negligent who:

- (a) in doing anything, or
- (b) in omitting to do anything that it is his duty to do, shows wanton or reckless disregard for the lives or safety of other persons.

(2) For the purposes of this section, **duty** means a duty imposed by law.

Criminal negligence

Causing death by criminal negligence

220 Every person who by criminal negligence causes death to another person is guilty of an indictable offence and liable:

- (a) where a firearm is used in the commission of the offence, to imprisonment for life and to a minimum punishment of imprisonment for a term of four years; and
- (b) in any other case, to imprisonment for life.

Causing bodily harm by criminal negligence

221 Every one who by criminal negligence causes bodily harm to another person is guilty of an indictable offence and liable to imprisonment for a term not exceeding ten years.

Arson by negligence

- 436. (1) Every person who owns, in whole or in part, or controls property is guilty of an indictable offence and liable to imprisonment for a term not exceeding five years where, as a result of a marked departure from the standard of care that a reasonably prudent person would use to prevent or control the spread of fires or to prevent explosions, that person is a cause of a fire or explosion in that property that causes bodily harm to another person or damage to property.
- 436. (2) Where a person is charged with an offence under subsection (1), the fact that the person has failed to comply with any law respecting the prevention or control of fires or explosions in the property is a fact from which a marked departure from the standard of care referred to in that subsection may be inferred by the court.

Landlord conviction

An appeal court has upheld the conviction of a landlord for criminal negligence causing death after numerous **Fire Code** violations led to a tenant's death.

The case demonstrates that violations of duties under the **Fire Code** can form the basis for a criminal negligence conviction.

Most recently was a conviction from Toronto Fire, Singh case.

Landlord conviction

Owners Jasvir and Sukhwinder Singh of 73 Humber College Blvd.



Questions?



Property management and superintendent responsibilities

Responsibilities after incident

- Maintain list of necessary service companies.
- Reset the fire alarm system only once Mississauga Fire has given permission.
- Reset elevators, smoke control and other systems as required.
- Have building owner and occupancy information readily available.
- Assist with further investigations as required.

Dixon Road Garbage Fire

"Supervisory staff" are...

Those occupants of a building who have some delegated responsibility for the fire safety of other occupants under the fire safety plan.



Supervisory staff can be ...

- Emergency Management Team.
- Owner.
- Maintenance Manager/Staff.
- Manager, Corporate Security.
- Security Guards.
- Fire Wardens.
- Associates.

Supervisory staff responsibilities include ...

- Using the voice communication system.
- Action to be taken to initiate a fire emergency system in the event of fire.
- Implement the established procedures for fire department access and direction to fire location.
- Understand the operation of the fire emergency systems.

Supervisory staff responsibilities also include ...

- Implement assigned responsibilities within the fire safety plan.
- Notify owner/property manager of building changes.
- Notify fire department of any fire system shut downs.
- Ensure maintenance of fire and life safety systems.
- Prepare and maintain list of persons requiring assistance.
- During a fire scenario, meet fire department at response point, give a detail of the fire location and persons requiring assistance.
- Maintain fire safety records.

Responsibilities before incident

- Know your emergency response duties (FSP).
- Be familiar with your building and occupants (persons requiring assistance).
- Have keys available and identified for firefighters.
- Be thoroughly familiar with the operation of all fire emergency systems in the building.
- Fire drills every three (3) months.
- Ensure maintenance is up-to-date.



Upon discovery of smoke or fire

- Alert occupants and leave fire area.
- Close all doors behind you. Yell "FIRE!".
- Activate the fire alarm system, use the pull station.
- Call 9-1-1 from a safe location. Provide the correct address, access to the building, location of the fire and your name.
- Proceed to the main entrance via stairs to ensure access by Mississauga Fire and Emergency Services.
- Ensure elevators are returned to ground.
- Ensure front door electromagnetic locking device has released, if applicable.

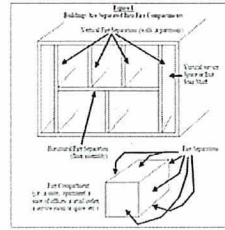
Upon discovery of smoke or fire(cont'd)

- If applicable, supervisory staff may use voice communication system.
- When firefighters arrive, **identify yourself as supervisory staff**, provide relevant information to firefighters and coordinate with Mississauga Fire and Emergency Services staff when requested.
- Provide firefighter access, emergency keys, building information and copy of FSP as required.
- Provide firefighters with current list of persons requiring assistance.
- Ensure the fire alarm is not reset until Mississauga Fire and Emergency Services give the all clear (refer to FSP).
- Use caution if you are going to investigate the area of the alarm! WHY?

Designs are based on the principles of life safety

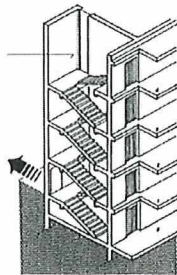
- Means of Egress.
- Construction.
- Fire Suppression Systems.
- Fire Detection Systems.
- Building Services.
- Interior Finish.
- Compartmentation.

Fire separations



Exits

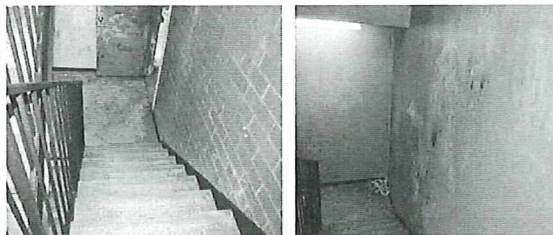
- Kept clear and accessible.
- No storage:
 - No wreaths, decorations on doors.
 - No items left in hallway/stairs.
- Doors close and latch:
 - Maintained in operating condition.
 - Rated wire glass in tact.



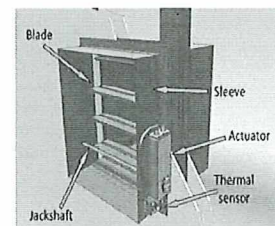
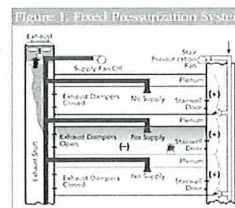
Exit examples



Smoke in the stairs



Pressurized stairs and shafts



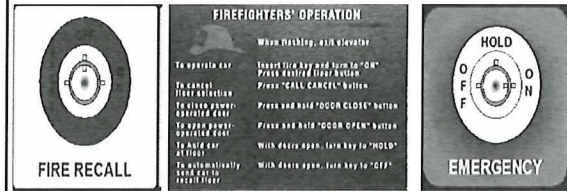
Occupant loads

- Party rooms.
- Maximum amount of people allowed.
- Designed or calculated and approved.



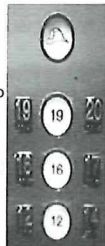
Elevators

- Red Helmet versus Yellow Helmet



Red helmet elevator

- Control switch inside the car may also be marked with the word EMERGENCY or FIRE OPERATIONS, in red.
- Shall have an emergency power supply of minimum two (2) hours duration.
- The manual recall switch shall be located in the entry-level lobby and may be also at the central alarm control facility (Fire Control Station), if present.
- May or may not recall on activation of fire alarm.

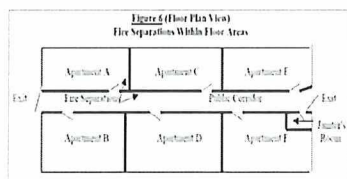


Yellow helmet elevator

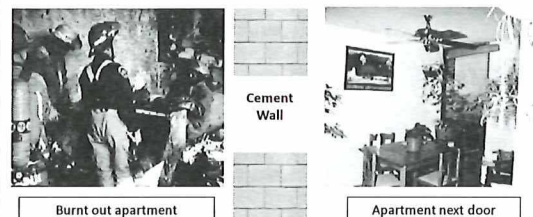
- Control switch in the elevator is marked by the word EMERGENCY in Yellow.
- May not have all the features of a Red helmet elevator.
- Elevator may not have an emergency power supply.
- Elevators are not required to automatically return to the entry level floor.
- Be familiar with your reset procedures.



Fire separations

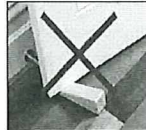
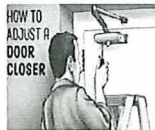
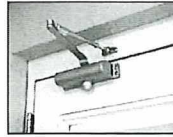


Remember survivability



Door closers

- Required for all suites.
- Required for all exit doors.
- Never propped open.
- Stop the spread of smoke.
- Limits oxygen.



Door closers

- <https://fireservice.closeyourdoor.org/>
- <https://ulfirefightersafety.org/research-projects/close-your-door.html>

No door closure = limited survivability



Fire alarm devices



The fire alarm system is monitored 24/7...?

- Not all buildings are monitored by outside companies.
- Monitoring can fail.
- You can provide valuable information the fire alarm system cannot.
- ALWAYS CALL 9-1-1 !!!

Preventing false alarms

- Pull station security covers.
- Contact MFES as we can offer support to help reduce false alarms.
- Scheduled maintenance. Call your central station and MFES before repair work.
- Heat trace the pipes in loading docks.
- Monitor temperature in rooms that contain sprinkler equipment.
- Keep all closures closed.



Is it a smoke alarm or detector?

- Smoke Alarm - Creates a local alarm

versus

- Smoke Detector - Connected to the fire alarm system

Detection in apartments

- Smoke alarms.
- Carbon monoxide alarms.
- If you hear an alarm next door or from the hallway ... act upon it!

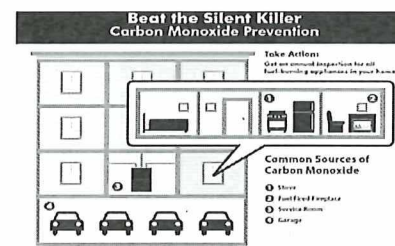


Smoke alarms

- Installed in all suites. Replace battery twice a year (unless equipped with long life battery).
- Check and test after every change in tenancy, when the battery is replaced or after any change in the electrical circuit serving the smoke alarm.
- Replace smoke alarms within the time frame indicated in the manufacturer's instructions.
- Installed outside all sleeping areas.
- As of 2012 new constructed residential occupancies require smoke alarms in each bedroom.
- Tenants tampering with smoke alarm can be charged.



Carbon monoxide sources

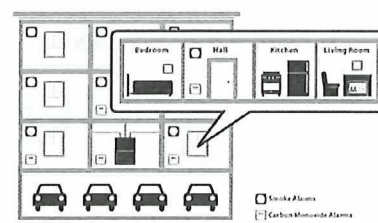


Carbon monoxide alarm

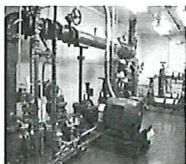
- Change battery twice a year (unless equipped with a long life battery).
- Replace CO alarm within the time frame indicated in the manufacturer's instructions.
- In apartments that are adjacent (above, beside, below) a fuel fired appliance such as fireplace, furnace, garage.
- Tenants can be charged if tampering with CO alarm.



Carbon monoxide placement

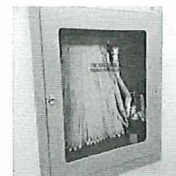
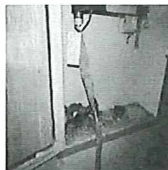


Fire sprinkler systems



Fire hose cabinet

- For trained personnel only.
- Always visible.



Other building services such as...

- Elevators.
 - Garbage Chutes.
 - Electrical Closets.
 - Mechanical Rooms.
- ✓ All are fire separated.
- ✓ No storage in areas.



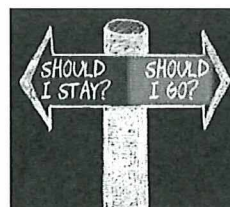
Chubb key box

- Contains keys for access to various areas of your building.
- Only Mississauga Fire & Emergency Services can access.
- Fixed to an exterior wall close to be main entrance.
- Visible at all times.
- Subject to By-law 289-97.



Public fire education and common issues

Should I stay or should I go?



Occupant's / tenant's responsibilities

In reacting to a fire in a high building, you shall decide on **two (2)** options:

- Do I leave the building to safety?

OR

- Is it safer to stay where I am?



Steps to take in the event of fire in your suite

- Leave your apartment.
- Confirm you have closed your door behind you.
- Activate the fire alarm pull station.
- Exit using the stairway.
- Do not use elevators.
- Call 9-1-1 once outside.

Steps to take in you decide to leave the building

- Feel the door to your unit to check if it's hot or cold.
- If your door is cold and the corridor is clear, take your keys, lock your door and go the nearest stairway.
- If there is smoke, do not enter; go to another stairway. If there isn't any smoke there, use that stairway to leave the building.
- If there is smoke, do not enter that stairway. If there are other stairways, try using them instead.
- If there are no other stairways, return to your unit and protect yourself from the smoke.

Steps to take if you encounter smoke while in the stairwell

- Leave that stairway and take the first available cross over floor.
- Use another stairway if it is clear of smoke.
- If you can't use another stairway, bang loudly on a unit door until you can find a place to take shelter and call 9-1-1.

Steps for sheltering in place

- Keep smoke from entering your unit.
- Use duct tape to seal cracks around the door.
- Place a wet towel at the bottom of the door.
- Call 9-1-1 and advise the fire department.
- Go to the balcony ... if it is safe.
- Keep low to the floor where the air is cleaner.

Smoke is toxic

- Smoke kills more people in a fire than the actual fire.
- Causes impaired responses.
- Can cause cardiac arrest.
- Toxic gases are found in smoke.
- Just a couple of breaths is enough to kill.



What happens if these steps are not followed?

- <https://www.youtube.com/watch?v=YiA7KOY2WF4>

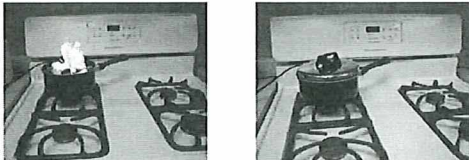
Most common causes of fire

- Cooking.
- Electrical.
- Cigarettes (smokers' materials).



Cooking

- Most common cause of fires.
- Look while you cook.
- Put a lid on it.



Electrical

- Have all electrical work done by a qualified electrician.
- Check electrical cords for cracks or damage.
- Do not over load wall outlets.
- Ensure that electrical cords are not running across doorways or under carpets.
- Use light bulbs that match the recommended wattage on lamps and fixtures.

Smoking

- Make sure smoking materials are out before disposing.
- Tenants should never throw smoking materials off the balcony or down a garbage chute.
- Proper disposal container.
- Common cause of fatal fires.

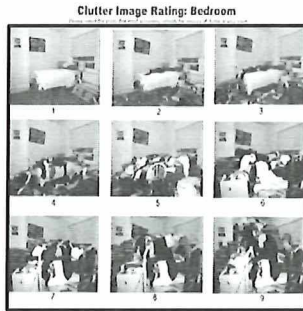


Common issues

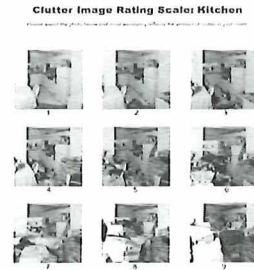
Other concerns for potential fire development

Hoarding

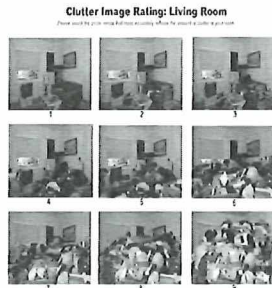
- Notice and report.
- Report to Manager.



Hoarding



Hoarding



Balcony

- Barbequing on balconies may be prohibited (check your condo or lease agreement).
- "Hoarding" of combustibles.

200 Wellesley – Sept. 24/10



Balcony

- 200 Wellesley



To schedule a high-rise fire
safety presentation for residents
call 905-896-5908

Questions?



General maintenance requirements



Maintenance

Whenever a defect or deficiency is discovered with fire safety equipment, CORRECTIVE ACTION must be taken by the owner or the authorized agent.

OR

When scheduled maintenance is required under the "Ontario Fire Code".



Maintenance – notification

Where tests, repairs or alterations are made to fire protection installations, including sprinkler and standpipe systems, a procedure of notification shall be established and the procedure shall include notifying the fire department, alarm monitoring company and the building occupants where necessary for safety in the event of a fire emergency.

False alarm fees

- False alarm fees are subject to change on a annual basis.
- By-law link for our fees and charges:
- https://www7.mississauga.ca/documents/bylaws/2018_Fire_and_Emergency_Services.pdf

Maintenance - records

- If a test, corrective measure or operational procedure required by The Fire Code is conducted, a written record shall be prepared noting what was done and the date and time it was done.
- A copy of any record required by this Code shall be retained at the building to which the record relates for a period of TWO (2) years.
- The Initial verification or test reports for fire protection systems installed after November 21, 2007 shall be retained throughout the life of the systems.

Maintenance - records

- **Recommendation** that all supervisory staff keep their own separate daily maintenance journal for liability and record keeping.



Maintenance – definitions

- **Check:** A visual observation to ensure the device or system is in place and is not obviously damaged or obstructed.
- **Inspect:** Physical examination to determine that the device or system will apparently perform in accordance with its intended function.
- **Test:** Operation of the device or system to ensure that it will perform in accordance with its intended operation or function.

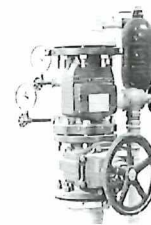
Maintenance – schedule - daily

- CHECK exit signs to ensure they are in clean and legible condition.
- CHECK fire alarm system power on and trouble signal indicators.
- Document and retain on site.



Maintenance - schedule - weekly

- CHECK that sprinkler system control valves are open if not locked or electrically supervised.
- CHECK sprinkler *water* supply pressure or system *air* pressure.
- Document and retain on site.



Maintenance - schedule - monthly

- INSPECT all doors in fire separations.
- INSPECT and TEST emergency lighting systems.
- INSPECT all portable fire extinguishers.
- Document and retain on site.



Maintenance - schedule - monthly

- TEST fire alarm system.
- TEST the alarm for the sprinkler system by flowing water.
- TEST emergency backup generator.
- INSPECT sprinkler valves that are locked open or electrically supervised.
- Document and retain on site.

Maintenance – schedule – every 3 months

- CONDUCT a fire drill for supervisory staff in high buildings (regulated by 3.2.6. of the Building Code).
- TEST closures, switches and dampers related to smoke control in high buildings.
- TEST elevator door-opening devices and key operated switches related to elevators in high buildings.
- Document and retain on site.

Maintenance – schedule – annually

- TEST smoke alarms in all units.
- TEST carbon monoxide alarms in all units.
- TEST the entire fire alarm system (by persons with qualifications acceptable to the Chief Fire Official).
- Document and retain on site.

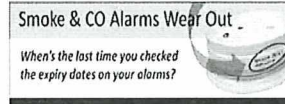
Maintenance – schedule – annually

- CHECK all sprinkler heads to ensure they are free from damage, corrosion, grease, dust, paint or whitewash.
- Confirm that there are spare sprinkler heads.
- INSPECT fire department connections for caps, wear, rust or obstructions.
- As of July 1, 2018 if the dry portion of the fire department connection has not been hydrostatically tested within the previous five years, the first test shall be completed before Jan. 1, 2019.



Maintenance – as required

- REPLACE smoke alarms and CO alarms within the time frame indicated in the manufacturer's instructions.
- TEST smoke alarms and CO alarms after every change in tenancy, when the battery is replaced or after any change in the electrical circuit serving the smoke alarm.

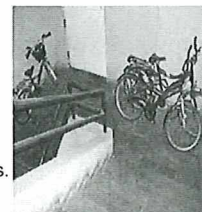


Maintenance – as required



Maintenance – as required

- CHECK that corridors are maintained free of obstructions.
- ENSURE that streets, yards and private roadways, which are provided for fire department access, are kept clear at all times.



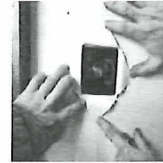
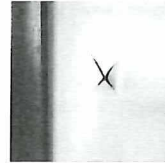
Maintenance – as required

- Clearance of 18 inches (45 cm) away from sprinkler heads for proper water spray patterns.
- Nothing is allowed to hang off sprinkler piping.



Maintenance – as required

- Check that the CHUBB or Security box is not damaged or obstructed.



Violations?

- Contact your property management company.
- If serious, call Mississauga Fire and Emergency Services, Fire Prevention and Life Safety Division at 905-896-5908.

What we have learned

- Applicable legislation.
- Owner's responsibilities.
- Superintendent's and tenant's responsibilities.
- Property management company responsibilities.
- General building design features in a high-rise building.
- General requirements of the Ontario Fire Code.
- General maintenance requirements and best practices.



Q and A



Contact

- Website: <http://www.mississauga.ca/portal/residents/fire>
- 905-615-3777 (General inquiries/Administration)
- 905-896-5908 (Fire Prevention and Life Safety Division)
- Twitter: @MississaugaFES
- Email: fire.prevention@mississauga.ca

**Fire department programs in
Mississauga**

Fire Inspections and
Enforcement Division:
905-896-5908

For all other City
departments:
call 3-1-1 or
905-615-4311 (outside city limits)

